

## INTERNATIONAL SEARCH REPORT

Int'l Application No  
PL 17 1B2004/003724

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61L2/16 C02F1/68 B01D27/14 B01F1/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61L C02F B01D B01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 780 197 A (SCHUMAN MICHAEL L) 25 October 1988 (1988-10-25) abstract; figures 2-5	1-16
X	WO 03/080128 A (CUNO INC) 2 October 2003 (2003-10-02) page 14, line 3 - page 18, line 14; figure 3	1-16
X	US 6 325 926 B1 (HANSEN AUSTIN C) 4 December 2001 (2001-12-04) abstract; figures 2,9	1-16
X	US 6 485 641 B1 (MCLEOD MARCUS DONALD) 26 November 2002 (2002-11-26) abstract; figure 1	1-16
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

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\* & \* document member of the same patent family

Date of the actual completion of the international search

14 December 2004

Date of mailing of the international search report

13/01/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 993 753 A (DAVIDSON DONALD R) 30 November 1999 (1999-11-30) abstract; figure 1 -----	1-16
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 05, 31 May 1999 (1999-05-31) & JP 11 028318 A (DENSO CORP), 2 February 1999 (1999-02-02) abstract -----	1,14-16

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/IB2004/003724

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4780197	A	25-10-1988	NONE	
WO 03080128	A	02-10-2003	EP 1482991 A1 WO 03080128 A1 US 2003209483 A1	08-12-2004 02-10-2003 13-11-2003
US 6325926	B1	04-12-2001	US 6325925 B1 US 6241884 B1 US 2001001511 A1	04-12-2001 05-06-2001 24-05-2001
US 6485641	B1	26-11-2002	AU 1191502 A CA 2426222 A1 CN 1471419 T CZ 20031032 A3 EP 1328329 A1 JP 2004512160 T PL 360906 A1 TW 508261 B WO 0234352 A1	06-05-2002 02-05-2002 28-01-2004 15-10-2003 23-07-2003 22-04-2004 20-09-2004 01-11-2002 02-05-2002
US 5993753	A	30-11-1999	NONE	
JP 11028318	A	02-02-1999	NONE	